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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,567	12/12/2001	Hidemichi Fujiwara	KAWAW19.001AUS	9280
20995	7590	06/09/2004	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			NGUYEN, CHAU N	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/021,567

Applicant(s)

FUJIWARA, HIDEMICHI

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears in the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 April 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-14, 17-19 and 21-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 11-14, 17, 18, 21 and 23-29 is/are allowed.  
6) ☒ Claim(s) 19 and 22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. in view of Matsuoka et al. (2003/0143102).

Sato et al. discloses a cable comprising a stranded wire (16) formed of a plurality of strands, at least one insulation layer (17) covering the stranded wire, and at least one shield (18) formed of a braid.

Sato et al. does not disclose each of the strands consisting essentially of Zr: 0.03 to 0.4 wt%, Fe: 0.2 to 0.7 wt%, Si: 0.2 to 0.6 wt%, Mg: 0.35 to 1.2 wt%, Cu: 0.05 to 0.4 wt%, and balance being Al and inevitable impurities, nor the braid containing more than 99 wt.% of Al.

Matsuoka et al. discloses an aluminum alloy consisting essentially of Zr: 0.03 to 0.4 wt%, Fe: 0.2 to 0.7 wt%, Si: 0.2 to 0.6 wt%, Mg: 0.35 to 1.2 wt%, Cu: 0.05 to 0.4 wt%, and balance being Al and inevitable impurities ([0016]). It

would have been obvious to one skilled in the art to use the aluminum alloy as taught by Matsuoka et al. for the conductive strands of Sato et al. since the alloy taught by Matsuoka et al. is capable of suppressing abrasion. Although not specifically disclosed by Sato et al, it would have been obvious to one skilled in the art to use pure aluminum, with more than 99wt.% of Al, for the braid of Sato et al. since pure aluminum is well-known in the art for its highly electric conductivity. Noted that the modified cable of Sato et al. can be used as an automobile power cable since it comprises structure and material as claimed.

3. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. in view of Matsuoka et al. as applied to claim 19 above, and further in view of Suzuki et al.

Claim 22 additionally recites each Al alloy strand being coated on its outer surface with a Ni layer. Suzuki et al. discloses an invention relating to a lead-bonding wire. Suzuki et al. discloses that nickel is known for being used to coat a lead for corrosion prevention (col. 1, lines 24-26). It would have been obvious to one skilled in the art to coat each aluminum alloy strand of Sato et al. with a nickel layer for corrosion prevention as taught by Suzuki et al.

***Allowable Subject Matter***

4. Claims 11-14, 17, 18, 21 and 23-29 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: regarding claims 11-14, please see Office Action mailed on July 3<sup>rd</sup> 2002. Regarding claim 17, it could be rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,573,454 (Fujiwara) in view of Matsuoka et al. However, a Terminal Disclaimer, which filed on April 15<sup>th</sup> 2004, has been approved and recorded. Claim 18 is allowed in view of the Terminal Disclaimer and the amendment, changing "consisting essentially of" to --consisting of--, filed on April 15<sup>th</sup> 2004. Claim 29 is allowed in view of the Terminal Disclaimer.

***Response to Arguments***

6. Applicant's arguments filed 4/15/04 have been fully considered but they are not persuasive. Regarding claim 19, applicant argues that a Declaration under 37 C.F.R. 1.131, filed on Dec. 3<sup>rd</sup> 2002, has established a date of invention at least as early as June 16<sup>th</sup> 1999. Therefore, Matsuoka et al. does not qualify as a prior art reference. This argument is not found persuasive. In the Declaration, applicant states that "prior to Aug. 21<sup>st</sup> 2001, I developed an automobile power cable

comprising.....each of the Al consisted essentially of: Zr in a 0.05 to 0.4 wt. %, Fe in a 0.05 to 0.2 wt.%, Si in a 0.05 to 0.2 wt. %, a total amount of one or at least two kinds selected from the group consisting of Be, Sr, Mg, Ti, and V in a 0.003 to 0.05 wt. %, and the balance being Al and inevitable impurities", see the Declaration, page 1, paragraph 4. This composition is different from the composition claimed in claim 19. Accordingly, Matsuoka et al. does qualify as a prior art reference.

### ***Summary***

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### *Communication*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Chau N Nguyen", with a long horizontal flourish extending to the right.

Chau N Nguyen  
Primary Examiner  
Art Unit 2831